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<b>14. ABSTRACT</b> Darton State College's Customized Nursing Programs for the Fort Benning Community were created specifically for the Fort Benning military community. The Customized Nursing Program consisted of two different tracks. The Traditional Hybrid Nursing program was for students who had no formal healthcare background. The Accelerated Bridge program was for LPNs, Paramedics and Army Medic 68W M6. The Customized Nursing Programs allowed students to take face-to-face and online courses that are instructor led, highly interactive, and use the latest multimedia technologies. All aspects of the of the courses, services and program were evaluated including quantitative analysis comparing the Fort Benning cohorts to the corresponding Darton State College cohorts for Semester Grade Point Averages (GPA), graduating GPAs, and retention rates. In three instances one of the Fort Benning cohorts was statistically higher than the corresponding Albany cohorts, and in one instance it was the reverse. The formative evaluations were constructive and used to continually improve the courses, services, and programs. The student focus groups, phone interviews and online surveys produced similar responses and overall were very positive. Overall students had positive feedback about the the customization and the flexibility the programs.				
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## TABLE OF CONTENTS

INTRODUCTION .....	4
COMPLETION OF STATEMENT OF WORK.....	5
RESEARCH ACCOMPLISHMENTS .....	9
REPORTABLE OUTCOMES .....	27
CONCLUSION.....	27

## INTRODUCTION

Darton State College, a public institution, is a part of the University System of Georgia and accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC). The Customized Nursing Programs for the Fort Benning Community were fully approved by the Georgia Board of Nursing, the Accrediting Commission for Education in Nursing, and the University System of Georgia. The Customized Nursing Programs for the Fort Benning Community and Research Project consisted of two programming options specifically designed for active duty military personnel and their dependents who were either attached to or who had recently deployed from Fort Benning, and civilian personnel working on Fort Benning. The Accelerated Healthcare Professional to RN Bridge Program was 3.5 semesters in length and designed for individuals in selected healthcare professions. Individuals that pursued this programming option were required to hold a valid Paramedic certification, LPN license, or Army Medic 68W M6 certification with a minimum of one year of experience. The Ft. Benning Traditional/Hybrid Nursing Program was 5 semesters in length and required no previous medical experience. Clinical rotations and lab experiences for both programs were conducted either on base or in the Columbus area at times and locations convenient for the military community.

The awarded funds were dedicated solely and specifically to meet project goals, objectives, and activities associated with the project. Detailed expenditure breakdowns are available for review in each of the projects previously submitted quarterly report. Funding for Year One was not received until September 14, 2011 so the timeline in the statement of work was adjusted; however, with previous funding, the courses for the first traditional cohort and the first Bridge cohort were taught in the Summer Semester 2011. The first bridge cohort graduated in Fall Semester 2011, and the first Traditional cohort graduated Summer Semester 2012. Each of the cohorts, six in all, proceeded through the program accordingly (see chart below).

<b>Cohort</b>	<b>Starting Semester</b>	<b>Ending Semester</b>
Bridge I	Fall 2010	Fall 2011
Traditional I	Spring 2011	Summer 2012
Bridge II	Fall 2011	Fall 2012
Traditional II	Spring 2012	Summer 2013
Bridge III	Fall 2012	Fall 2013
Traditional III	Spring 2013	Summer 2014

## COMPLETION OF STATEMENT OF WORK

### **Goal One (Accomplished):**

Darton State College (DSC) desired to provide a flexible military friendly Accelerated Healthcare Professional Bridge to RN and the Traditional Nursing programs. DSC accomplished this goal by doing the following:

- Providing online or face-to-face associate degree classes conducted day, evening, or weekend, compatible with military schedules.
- Providing clinical rotations and necessary lab experiences conducted on base or in local hospitals at times convenient to the military community.
- Creating programming that provided the ability to suspend associate degree coursework for months based on deployments and resume coursework with another group of students.
- Creating programming that provided the ability to complete associate degree coursework via distance learning if transferred out of the Fort Benning area.
- Creating special review resources provided for use on netbooks or computers so that students can successfully return to the programs after deployments or other assignments.
- Developing and adopting an extensive array of web-based multimedia resource in multiple formats to stimulate and encourage learning.
- Providing a flexible mentoring program with interactive resources was developed

Students participating in the Darton State College Customized Nursing Programs had the option of pursuing their nursing associate degree utilizing online or face-to-face classes conducted day, evening, and weekend. Fort Benning faculty worked closely with students to each semester to modify face-to-face meeting times as well as tutoring and test times so that they were compatible with the student's military schedules each semester. Faculty was able to secure clinical rotation sites on base and at local hospitals. Thus, providing students with an array of clinical locations that conveniently fit the student's military and family life schedules.

Over the course of the project accommodations were made for several students who either were assigned temporary duty away at another location or had a spouse deploy. Students who requested support services were provided all the necessary accommodations to facilitate their success in the program. Examples include an active duty student who attended military training for one month in Texas. Through the flexibility and support of the program he was able

to make up his clinical rotation and have full access to course and testing materials online while he was away from Fort Benning, Georgia. A dependent student whose husband was transferred to Fort Campbell, Kentucky was allowed to complete her clinical rotation early, so that she could set up their home in Fort Campbell. Additionally, another dependent student whose husband was transferred to Okinawa, Japan the semester before her graduation was allowed to complete her clinical rotations for that semester using a modified schedule. She was then able to complete the rest of the semester's coursework online. The following semester she traveled back to Fort Benning for her remaining clinical rotations. This option allowed her to successfully complete the program and graduate. All of the students requesting accommodations due military orders were assisted and successfully graduated from the nursing program. These students reported through focus groups, emails, and conversations that they appreciated this component of their nursing program. Students stated that without this added flexibility their progression towards graduation would not have been possible.

Netbook/laptop versions of nursing core courses were successfully developed for students who might deploy while in the Fort Benning program and have limited or no internet accessibility. The courses designed included Anatomy and Physiology I (BIOL 1110K), Anatomy and Physiology II (BIOL 2111K), Medical Terminology (ALHE 1120), English Composition II (ENGL 1102), Public Speaking (COMM 1100), General Psychology (PSYC 1101), and Fitness I (PHED 1161). The Statement of Work called for the development of netbook/laptop version of Human Growth and Development (PSYC 2103); however this was modified when the nursing curriculum changed. This change allowed students a choice between taking General Psychology and Human Growth and Development. Therefore, General Psychology instead of Human Growth and Development was adapted for netbooks/laptops, because students expressed an interest in taking General Psychology instead of Human Growth and Development.

Darton State College implemented a mentoring program with great success. Each cohort participated in the mentoring program which included small group and individual sessions that provided students with information related to course content, study skills, and time management. Sessions were conducted using several flexible options for ease of student access. These options included face-to-face (in Columbus), online (through the learning management system and email), and telephone mentoring. Through focus groups and

surveys students throughout the overall project period continually expressed high satisfaction with the mentoring instruction provided by Ms. Verna Inandan, senior nurse faculty and lead mentor. Students applauded her in-person visits to the Fort Benning classroom as well as her online learning sessions. In addition to the mentoring program with Ms. Inandan, each Fort Benning faculty member mentored the students as well through study groups, individual meetings with students having academic trouble, goal setting and time management. The students expressed great satisfaction with the various mentoring options and found mentoring very valuable.

**Goal Two (Accomplished):**

Developed the courseware and resources outlined in the original proposal narrative and in the Milestones and Timetable section of the proposal.

**Development of Courseware**

All of the courses indicated in the Statement of Work were completed and made accessible through the institutions learning management system. This included creating interactive courseware for the following core courses: Anatomy and Physiology I (BIOL 1110K), Anatomy and Physiology II (BIOL 2111K), Medical Terminology (ALHE 1120), English Composition II (ENGL 1102), Public Speaking (COMM 1100), General Psychology (PSYC 1101), and Fitness I (PHED 1161). Additionally, interactive courseware was created for the following nursing courses: Adult Health II (NURS 1112), Nursing Care of Women and Children (NURS 2111), Adult Health III (NURS 2115), and Nursing Leadership (NURS 2117). Through focus groups, phone interviews, and online surveys, students provided constructive input for the developed courses. The Resource Advisory Committee which was comprised of faculty and staff reviewed all courses, resources, and student evaluations. The committee met regularly during the initial design of all courses and provided recommendations and, in some cases, developed or worked with the multimedia specialist to implement components they designed. All items were shared, obstacles, and solutions discussed, and new technologies explored. Standardization of courses and nursing board requirements were also addressed. The Resource Advisory Committee also met to review the courses that were developed and/or modified for use with standalone netbooks and laptops that could be used by students who were deployed with limited to no internet access.

## **Development of Resource Material**

The development and adoption of resource material was an essential part of the project. Senior nursing faculty collected course resources from the various nurses who taught online and assured the quality and completeness of the course resources. A File Transfer Protocol site was created and the material stored there for access by the faculty members and multimedia specialists designing and enhancing courses for the project. The collected interactive material included online quizzes, voiceover PowerPoint Presentations, online lectures, video tutorials, lab lecture videos, multimedia math solutions, and self-assessment tools. These resources in addition to others were utilized by students in each cohort and evaluated each semester.

Ms. Verna Inandan, senior nursing faculty and lead mentor, created several online review courses to provide remediation to students needing academic enrichment. The online review material that Ms. Inandan created was placed in the Desire2Learn learning management system. An example of the types of course enhancements made as a result of student feedback include: the creation of additional chapter specific study materials, the addition of embedded YouTube videos and lectures, and the addition of live review sessions conducted using the Blackboard Collaborate platform. Ms. Inandan kept open lines of communication with both the Fort Benning faculty and students. All of the Fort Benning students were registered not just in one but in all three course specific review courses (Fundamentals of Nursing, Adult Health I and Adult Health II). In an effort to fully support the students and their progression toward graduation, online course review materials were made available to students after each course was completed. This enhancement was designed to allow student's access to course review materials between semesters and when starting a new course.

## **Learning Management System Conversion**

The University System of Georgia changed its enterprise learning management systems from Blackboard Vista to Desire2Learn. Darton State College made the switch to Desire2Learn Spring Semester 2013. All of the courses and resource material that was designed for use in WebCT from the start of the project to Fall Semester 2012 were converted for student use in the new Desire2Learn system. Once converted the courses were reviewed throughout Spring Semester 2013 to ensure student accessibility. This conversion, along with other revisions made to the courses, enabled students to access courses on mobile devices, a feature that students expressed great interest in having access too. All modifications to course accessibility were made

based on course evaluations, focus groups, and survey information. As each semester progressed after the switch to Desire2Learn all of the new courses and resources were designed specifically for Desire2Learn and utilized the feedback of students and faculty.

**Goal Three (Accomplished):**

Conducted extensive research, as outlined in the research section, to evaluate all courses, resources, services, and customized nursing programs to provide valuable information on design of programs, services, courses and resources that can yield effective customized programs to enable members of the military community to overcome the obstacles inherent in the military lifestyle and to maximize their success and completion rates.

**Qualitative Evaluations and Surveys**

Each semester qualitative evaluations and surveys were conducted once the semester concluded as outlined in the proposal. The Grant Department worked with the faculty to find a convenient time to conduct the evaluations. Times were selected that fit the students' academic class schedule and did not interfere with classroom learning. Focus group interviews and online surveys were conducted the same day. Telephone interviews were conducted in the days following the focus group and online surveys. Each new cohort was provided informed consent forms that communicated to them what Darton State College was doing with the data collected in the focus groups, telephone interviews, and online surveys. The results of all evaluations were shared with all the appropriate stakeholders and Darton State College administrative offices as indicated. No student names or identifying numbers were included in any summary or report. All of the individual semester qualitative reports were included in the quarterly and annual reports.

**Focus Group**

The focus group meetings were conducted each semester in Columbus in the classroom and lab facilities with the exception of one on the Darton State College main campus in Albany, Georgia. These meetings covered the previous semester's courses. The purpose of the focus group meetings was to have a face-to-face meeting with the students to facilitate communication between them and the Grant Department. This evaluation component proved helpful in determining improvements that needed to be made to the program and in solving problems students encountered. The meetings always began with staff introductions and assurances. Students were assured that the focus group meetings were strictly confidential. They were also encouraged to call the Grants Department for non-academic support (registrar, financial aid, cashier etc..) whenever needed. In the focus groups sessions each semester, students were asked

their opinions on their obstacles to success, benefits of the program, the benefits of online instruction, and about effective and non-effective components. The focus group meetings students had the opportunity to let the Grant Department know whether they were communicating well with their instructors, whether they felt connected to the courses, as well as how they thought the program could be improved. They were also asked about any technical difficulties and how they were handled. They were also given the opportunity to discuss any academic issues that they may need advocacy with.

The results showed that the students in every cohort had the same obstacles, mainly time management and juggling work schedules and families. They also describe issues with financial aid, fees, out-of- state tuition, etc.; the Grant Department went to great lengths as a single-point-of contact resource to solve these problems for students whenever possible. The most frequent comment students gave about the benefits of the program was its extreme flexibility, which allowed them to work full time, have families, and go to school. It is common knowledge that most nursing programs insist that students not work full time and are very inflexible in scheduling. So, having a flexible nursing program that was military friendly was a highlight for the students.

Through the focus groups, students provided detailed information about the Fort Benning instructors. Overall, students like the ease of access that they had to their instructors. They were able to visit, call, email, and text the Fort Benning faculty members whenever needed. Students reported that the Fort Benning faculty was also very good about scheduling class times, tutoring sessions, and clinical rotations to accommodate the students where possible. The students also liked having small class sizes that allowed the professors to get to know them individually and to understand their unique strengths and weaknesses. During each focus group meeting, it continued to be emphasized that they were to call the Grant Department Office to handle any non-academic problems that may arise during the course of their matriculation.

### **Telephone Interviews & Online Surveys**

The students were contacted each semester and asked questions regarding their experiences in the previous semester's courses. The telephone interviews and online surveys provided students the opportunity to privately share thoughts and opinions. This information was used to assist in evaluating the courses and making modifications. Students were asked to rate student resources and were asked many questions about their experiences in the program. In

addition, they were asked about their obstacles to success and then asked to make comments about the program in general. Many students mentioned balancing time, learning course material, handling family life, and dealing with work issues as their greatest concerns. The students were also asked to rate the various resources used for the courses, the mentoring program, the use of technical support, and students services.

To determine how the program was viewed by students, they were asked a series of questions on how easy the resources were to navigate and use, and whether they would recommend the courses to fellow students. The results of the telephone interviews and online surveys support the outcomes of the focus groups. Students each semester continually exhibited great satisfaction with the response to their needs in individual courses. Students stated that the online 24/7 accessibility was critical to their success, and expressed great satisfaction with the ability to download course and study material to various devices, allowing them to study anywhere anytime. Students also responded favorably to having 24 hour online technical support provided by the institution and University System of Georgia. Overall, students reported satisfaction with their courses and resources. All of the individual semester qualitative reports were included in the quarterly and annual reports.

### **Quantitative Evaluation and Analysis**

Regine Haardoerfer, PhD, an Assistant Research Professor at Emory University, who completed doctoral studies in research, measurement, and statistics from Georgia State University, conducted the quantitative evaluations outlined in the proposal using data retrieved from the student information system and coded to remove student names or identifying numbers. She performed group comparisons between each of the Fort Benning programs and the respective comparison program. Independent t-tests and Levene's Test for Equality of Variances were used to assess differences between the Fort Benning programs and the Darton State College programs in terms of graduating GPA as well as individual semester GPA. Beyond this, chi-square tests were used to compare the Fort Benning graduates to the Darton State College graduates in regard to passing the NCLEX exam. In addition retention rates, graduation rates and persistence rates of the Fort Benning cohorts were compared using chi-square tests to the Darton State College cohorts. All of the individual semester quantitative reports were included in the quarterly and annual reports.

## Analysis of Individual Cohorts

In terms of demographic characteristics, Fort Benning students were similar in terms of age and gender, with about three quarters women and the average age around 35. However, there were significantly more African American students in the Fort Benning cohorts (52.7%) compared to the Albany cohorts (34.01%). In both groups, most students were part-time students.

**Table 1. Demographics of Fort Benning and Albany students across cohorts**

	Fort Benning		Albany		
	N	%	N	%	p-value
<b>Total</b>	<b>76</b>		<b>208</b>		
Gender					
Female	58	76.32	159	76.44	.98
Male	18	23.68	49	23.56	
Race					
Caucasian	33	44.59	126	63.96	.004*
African American	39	52.70	67	34.01	
Other	2	2.70	4	2.04	
Full-time/part-time student					
Full-time	7	9.21	18	8.65	.88
Part-time	69	90.79	190	91.35	
	<b>Mean</b>	<b>SD</b>	<b>Mean</b>	<b>SD</b>	
Age at program start	35.7	6.85	35.1	8.37	.55

Note: \* When comparing Caucasian and African American. Fort Benning students had comparable graduation GPAs, with the mean graduating GPA of just over 3.0.

Retention rates were slightly higher in Fort Benning students, but graduation rates were on par.

**Table 2. Graduation GPAs, retention and graduation rates across cohorts**

	Fort Benning		Albany		
	Mean	SD	Mean	SD	p-value
Graduating GPA	3.07	0.40	3.03	0.39	.55
	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	
Retention rates	61	82.4	163	78.4	.46
	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	
Graduation rates	56	73.7	154	74.0	.95

Beyond graduation, Fort Benning students also took the NCLEX exam. Pass rates vary greatly from 71% to 30%. This is not surprising given the small class sizes. There were no significant differences between pass rates between the accelerated and the traditional cohorts. Note that this does not include the NCLEX results from the last traditional cohort as those students just

graduated and the results are still pending.

We had initially hypothesized that those who would participate in the mentoring program would perform better. However, due to changes in the program, all students were required to utilize the mentoring program.

We had also hypothesized that army medics would perform better. However, only one Army Medic was enrolled in the last cohort, and thus we cannot draw any conclusions in that regard.

### Comparing Bridge Cohorts

In the accelerated (Bridge) cohorts, Fort Benning students had higher semester GPAs. This also was the case when only looking at grades from the Nursing courses. However, this advantage did not last and by the second semester, there were no significant differences in grades between the groups. Similarly, there were no differences in graduating GPA, retention rates, and graduation rates.

**Table 3. Performance comparison of Fort Benning and Albany students enrolled in the Bridge program**

	Fort Benning		Albany		
	Mean	SD	Mean	SD	p-value
Graduating GPA	3.11	0.41	3.04	0.40	.41
Semester GPAs					
1. Semester	3.19	0.49	2.94	0.56	.02
2. Semester	2.58	0.67	2.75	0.57	.14
3. Semester	2.96	0.55	2.87	0.58	.42
4. Semester	3.00	0.76	2.76	0.62	.07
GPA from Nursing courses per semester					
1. Semester	3.18	0.50	2.81	0.67	.003
2. Semester	2.56	0.63	2.72	0.58	0.16
3. Semester	2.85	0.70	2.85	0.53	0.96
4. Semester	2.90	0.76	2.76	0.62	0.28
Retention rates	N	%	N	%	
One year	31	91.18	128	86.49	.46
Less than one year	3	8.82	20	13.51	
Graduation rates	N	%	N	%	
Yes	28	77.78	123	83.11	.46

## Comparing Traditional Cohorts

Across the traditional cohorts, Fort Benning students did equally well as Albany students in terms of grades and retention. One anomaly was that Fort Benning students had lower semester GPAs in the third semester. The differences were due to some outliers with a few students with very low semester GPAs before dropping out of the program. Albany students (who had much lower retention rates) might have dropped out earlier. This resulted in a much higher graduation rate of Fort Benning students at 70.0% compared to only 51.5% in the Albany students. The difference is most notable in the last cohort where the graduation rate for Fort Benning students was more than twice that of the Albany students.

**Table 4. Performance comparison of Fort Benning and Albany students enrolled in the traditional program**

	Fort Benning		Albany		
	Mean	SD	Mean	SD	p-value
Graduating GPA	3.00	0.38	2.95	0.322	.64
Semester GPAs					
1. Semester	2.81	0.63	2.65	0.83	.30
2. Semester	2.73	0.55	2.61	0.64	.39
3. Semester	2.56	0.91	2.91	0.36	.04
4. Semester	2.63	1.14	2.75	0.57	.59
GPA from Nursing courses per semester					
1. Semester	2.80	0.61	2.59	0.86	.18
2. Semester	2.69	0.68	2.62	0.66	.60
3. Semester	2.59	1.04	2.89	0.37	.12
4. Semester	2.62	1.14	2.75	0.56	.54
Retention rates	N	%	N	%	
One year	30	75.0	35	58.3	.09
Less than one year	10	25.0	25	41.7	
Graduation rates	N	%	N	%	
Yes	28	70.0	31	51.5	.07

## Multivariate regression results

Across cohorts, there were no significant predictors (age, race, gender) of neither graduating GPA nor likelihood of graduating from the program.

The Fort Benning students in either program were equally likely to graduate and had comparable graduating GPAs.

## Analysis of Individual Cohorts

### I Bridge Cohorts

#### B1. The first bridge cohort – Graduated Fall 2011

The first bridge cohort started with 13 Fort Benning students. The students were almost equally male (53.8%) and female (46.2%). Of the 12 students who provided race, 7 were African American and 5 were Caucasian. All students but one were part-time students. In the third semester, 2 students left the cohort. The remaining 11 completed all four semesters in the program (Table B1.1). Overall, there was a higher percentage of men and African Americans enrolled in the Fort Benning cohort than in the Albany cohort. The Fort Benning cohort was, on average, about 1.5 years older than the Albany cohort. Both cohorts had equally high percentages of part-time students. (Table B1.1). Despite these differences, the Fort Benning cohort was not statistically significantly different on key demographics (gender, race, and age) from the Albany cohort.

Table B1.1. Comparing descriptives of the first Fort Benning Bridge Cohort students with the Albany cohort in the first semester

	Fort Benning		Albany		
	N	%	N	%	p-value
Gender (N = 13)					
Female	6	46.2%	26	63.4%	.270
Male	7	53.8%	14	34.1%	
Race (N = 12)					
Caucasian	5	41.7%	26	65.0%	.254
African American	7	58.3%	13	32.5%	
Asian	0	-	1	2.5%	
Full-time/part-time student					
Full-time	1	7.7%	1	2.4%	.382
Part-time	12	92.3%	40	97.6%	
	Mean	SD	Mean	SD	
Age at program start	38.46	7.11	36.98	8.10	.556

Table B1.2 shows that the Fort Benning cohort had a slightly higher graduating GPA that was not statistically significantly higher than the graduating GPA of the Albany cohort (Hypothesis II). Furthermore, there was not statistically significantly difference between individual semester GPAs between the cohorts (Hypothesis IV). The means were sometimes higher in the Fort Benning group (semesters 1 and 3) and sometimes higher in the Albany group (semesters 2 and 4). The same was true for the GPA from only the nursing courses. There was no statistically significant difference in graduation rates from the Fort Benning Bridge cohort with 76.9% of the students graduating and the Albany cohort (Hypothesis XV). There was also not difference in retention rates with 84.6% of the students enrolled for at least one year (Hypothesis XIV). All of the Fort Benning students that graduated from the program passed the NCLEX exam compared to 82.1% from of the Albany students. The difference was not statistically significant due to the small sample size.

Table B1.2. Comparing the Fort Benning and the Albany cohorts on key success indicators

	<b>Fort Benning</b>		<b>Albany</b>		
	<b>Mean</b>	<b>SD</b>	<b>Mean</b>	<b>SD</b>	<b>p-value</b>
Graduating GPA	3.228	0.332	3.166	0.382	.641
Semester GPAs					
5. Semester	3.121	0.575	3.057	0.405	.657
6. Semester	2.667	0.604	2.905	0.514	.172
7. Semester	3.000	0.636	3.061	0.452	.699
8. Semester	3.130	0.837	3.050	0.613	.724
GPA from Nursing courses per semester					
5. Semester	3.139	0.634	2.976	0.371	.394
6. Semester	2.585	0.518	2.858	0.541	.114
7. Semester	2.920	0.594	3.000	0.501	.661
8. Semester	3.091	0.831	3.077	0.580	.949
Retention rates	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	
At least one year	11	84.6%	39	95.1%	.208
Less than one year	2	15.4%	2	4.9%	
Graduation rates					
Yes	10	76.9%	38	92.7%	.115
No	3	23.1%	3	7.3%	
NCLEX Exam rates – first attempt					
Yes	7	70.0%	32	82.1%	.399
No	3	30.0%	7	17.9%	

## The Second Bridge Cohort – graduated Fall 2012

The second bridge cohort started in the fall of 2011 with 12 students. The large majority was female (75%) and African American (75%). Most students were enrolled part time (83.3%) and the average age was almost 38 years (Table B2.1).

The racial composition of the Fort Benning cohort is statistically significantly different than that of the Albany cohort (Table B2.1) with a higher percentage of African Americans. The two cohorts are not significantly different in terms of gender, age, and part-time/full-time student status.

Table B2.1. Comparing descriptives of the first Fort Benning Bridge Cohort students with the Albany cohort in the first semester

	Fort Benning		Albany		
	N	%	N	%	p-value
Gender					
Female	9	75.0%	35	71.4%	.805
Male	3	25.0%	14	28.6%	
Race					
Caucasian	3	25.0%	30	68.2%	.007**
African American	9	75.0%	14	31.8%	
Full-time/part-time student					
Full-time	2	16.7%	7	14.3%	.835
Part-time	10	83.3%	42	85.7%	
	Mean	SD	Mean	SD	
Age at program start	37.83	6.90	36.59	8.57	.643

Note: \*\*  $p < .01$ .

Table B2.2 shows the mean semester GPAs for both cohorts as well as the GPA from the nursing courses for all semesters as well as the graduating GPA. The graduating GPA of the Fort Benning cohort was higher (3.297) than that of the Albany cohort (3.112). However, the difference was not statistically significant. In the first semester, the Fort Benning students performed statistically significantly better than the Albany students both in their nursing courses as well as overall. Their average first semester GPA was higher by 0.386 and their average GPA from the nursing courses was higher by more than 0.5. Those differences in semester GPA (which was identical to the GPA from nursing courses) were not observed in the second, third, and fourth semester. However, the GPA in the 4<sup>th</sup> semester was higher by more than 0.3 for the Fort Benning students.

Retention rates and graduation rates were comparable between the cohorts and about 80%.

Table B2.2. Comparing the Fort Benning and the Albany cohorts on key success indicators

	Fort Benning		Albany		p-value
	Mean	SD	Mean	SD	
Graduating GPA	3.297	0.357	3.112	0.393	.20
Semester GPAs					
1. Semester	3.451	0.406	3.065	0.511	.018*
2. Semester	2.682	0.760	2.786	0.551	.652
3. Semester	3.130	0.489	2.856	0.601	.153
4. Semester	3.297	0.640	2.963	0.451	.05
GPA from Nursing courses per semester					
1. Semester	3.467	0.365	2.959	0.658	.013*
2. Semester	2.682	0.760	2.786	0.551	.652
3. Semester	3.130	0.489	2.856	0.601	.153
4. Semester	3.091	0.701	2.952	0.491	.451
Retention rates	N	%	N	%	
At least one year	10	76.9%	40	81.6%	.70
Less than one year	3	23.1%	9	18.4%	
Graduation rates					
Yes	10	76.9%	39	76.5%	.96

Note: \*  $p < .05$ .

### B3.Third Bridge Cohort – Started Fall 2012

The third bridge cohort started in the fall of 2012 with 10 Fort Benning students. The large majority was female (70%) and African American (80%). Most students were enrolled part time (80.0%) and the average age was just above 38 years (Table B3.1).

The racial composition of the Fort Benning cohort is statistically significantly different than that of the Albany cohort (Table B3.1) with a higher percentage of African Americans. The two cohorts are not significantly different in terms of gender, age, and part-time/full-time student status.

Table B3.1. Comparing descriptives of the first Fort Benning Bridge Cohort students with the Albany cohort in the first semester

	Fort Benning		Albany		
	N	%	N	%	p-value
Gender					
Female	7	70.0%	48	82.8%	.343
Male	3	30.0%	10	17.2%	
Race					
Caucasian	2	20.0%	33	60.0%	.049*
African American	8	80.0%	21	38.2%	
Asian	0	-	1	1.8%	
Full-time/part-time student					
Full-time	2	20.0%	4	6.9%	.177
Part-time	8	80.0%	54	93.1%	
	<b>Mean</b>	<b>SD</b>	<b>Mean</b>	<b>SD</b>	
Age at program start	38.10	7.52	34.07	6.65	.087

Note: \*  $p < .05$ .

Table B3.2 shows the mean semester GPAs for both cohorts as well as the GPA from the nursing courses of the first semester. In both cases, the Fort Benning students performed better than the Albany students. Their average first semester GPA was significantly higher by 0.321 and their average GPA from the nursing courses was higher by 0.209 (not significant). However, in the second, third, and fourth semesters the GPA of both groups were very similar (around 2.3 in the second and around 2.7 in the third, and around 2.4 in the fourth semester) both for the nursing courses GPA and the overall GPA.

Also, retention rates were higher in the Fort Benning group (90% versus 81%), but not statistically significant. The graduation rates were comparable between the groups (80% Fort Benning, 81% Albany).

Table B3.2. Comparing the Fort Benning and the Albany cohorts on key success indicators

	<b>Fort Benning</b>		<b>Albany</b>		
	<b>Mean</b>	<b>SD</b>	<b>Mean</b>	<b>SD</b>	<b>p-value</b>
Graduating GPA	2.744	0.366	2.88	0.384	.34
Semester GPAs					
1. Semester	2.900	0.216	2.579	0.769	.01*
2. Semester	2.376	0.591	2.277	0.960	.75
3. Semester	2.706	0.491	2.742	0.627	.85
4. Semester	2.375	0.518	2.319	0.515	.78
GPA from Nursing courses per semester					
1. Semester	2.972	0.328	2.763	0.657	.33
2. Semester	2.349	0.618	2.324	0.983	.94
3. Semester	2.666	0.468	2.737	0.474	.68
4. Semester	2.409	0.498	2.319	0.515	.65
Retention rates	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	
One year	9	90.0	47	81.0	.49
Less than one year	1	10.0	11	19.0	
Graduation rates					
Yes	8	80.0	47	81.0	.94

Note: \*  $p < .05$ .

## II Traditional Cohorts

### T1.First Traditional Cohort – Started Spring 2011 graduated Summer 2012

The first traditional Fort Benning cohort started with 13 students. Most were female (84.6%) and African American (50%). All were enrolled as part-time students. The average age was almost 38 years.

The Fort Benning cohort had more men and more African Americans enrolled than the Albany cohort. The Fort Benning students were, on average, about 3 years older. However, the differences were not statistically significant (Table T1.1).

Table T1.1. Comparing descriptives of the first Fort Benning Bridge Cohort students with the Albany cohort in the first semester

	<b>Fort Benning</b>		<b>Albany</b>		
	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>p-value</b>
Gender					
Female	11	84.6%	28	90.3%	.586
Male	2	15.4%	3	9.7%	
Race					
Caucasian	5	41.7%	20	69.0%	.117
African American	6	50.0%	9	31.0%	
American-Indian or Alaskan Native	1	8.3%	0	-	
Full-time/part-time student					
Full-time	0	-	1	3.2%	.512
Part-time	13	100%	30	96.8%	
	<b>Mean</b>	<b>SD</b>	<b>Mean</b>	<b>SD</b>	
Age at program start	37.85	6.45	34.58	9.17	.189

Table T1.2 shows the mean semester GPAs and the mean GPAs per semester from the nursing courses. There were no statistically significant differences in the semester GPAs between the Fort Benning and the Albany students. The means were higher for the Fort Benning students in the first semester and lower in the subsequent semesters. The mean nursing GPAs show similar patterns. However, the Albany students had a significantly higher GPA in their nursing courses during the second semester.

More students in the Fort Benning cohort (84.6%) were retained for at least 4 semesters than in the Albany cohort (72.7%), although the difference was not statistically significant (Table T1.2).

Table T1.2. Comparing the traditional Fort Benning and the Albany cohorts on key success indicators

	<b>Fort Benning</b>		<b>Albany</b>		
	<b>Mean</b>	<b>SD</b>	<b>Mean</b>	<b>SD</b>	<b>p-value</b>
Graduating GPA	2.950	0.322	2.899	0.438	.743
Semester GPAs					
1. Semester	2.935	0.629	2.893	0.472	.809
2. Semester	2.519	0.632	2.859	0.364	.091
3. Semester	2.708	0.889	2.924	0.379	.417
4. Semester	2.427	0.516	2.587	0.500	.413
5. Semester	2.818	0.751	2.826	0.388	.564
GPA from Nursing courses per semester					
1. Semester	2.910	0.618	2.838	0.617	.725
2. Semester	2.462	0.660	2.885	0.326	.045*
3. Semester	2.723	0.860	2.915	0.390	.456
4. Semester	2.427	0.516	2.587	0.500	.413
5. Semester	2.818	0.751	2.826	0.388	.564
Retention rates	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	
More than one year	11	84.6	25	80.6	.395
Less than one year	2	15.4	6	19.4	
Graduation rates					
Yes	8	61.5	20	64.5	.94

## T2.Second Traditional Cohort – Started Spring 2012

The second traditional cohort started in the spring of 2012 with 14 students. Please note: With no parallel Albany cohort in spring 2012, this cohort will be compared the Albany cohort that started in spring of 2011. The all but one of the students are female (93%) and Caucasian (71.4%). All students were enrolled part time and the average age was almost 38 years (Table T2.1).

The two cohorts are not significantly different in regard to demographic composition.

Table T2.1. Comparing descriptives of the second traditional Fort Benning Bridge Cohort students with the first traditional Albany cohort

	<b>Fort Benning</b>		<b>Albany</b>		
	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>p-value</b>
Gender					
Female	13	92.9%	28	90.3%	.63
Male	1	7.1%	3	9.7%	
Race					
Caucasian	10	71.4%	20	69.0%	.58
African American	4	28.6%	9	31.0%	
Full-time/part-time student					
Full-time	0	0%	1	3.2%	.69
Part-time	14	100%	30	96.8%	
	<b>Mean</b>	<b>SD</b>	<b>Mean</b>	<b>SD</b>	
Age at program start	30.57	4.64	34.58	9.17	.58

Table T2.2 shows the mean semester GPAs for both cohorts as well as the GPA from the nursing courses of the four semesters. In both cases, the Fort Benning students did as well as the Albany students during the first four semesters. However, in the 5<sup>th</sup> semester, the Fort Benning students had significantly higher GPAs in their nursing courses as well as overall. The average Fort Benning students' graduating GPA's were slightly higher than the Albany students'. Retention rates were comparable for the two groups.

Table T2.2. Comparing the second traditional Fort Benning cohort and the first Albany traditional cohort on key success indicators

	<b>Fort Benning</b>		<b>Albany</b>		
	<b>Mean</b>	<b>SD</b>	<b>Mean</b>	<b>SD</b>	<b>p-value</b>
Graduating GPA	3.117	0.288	2.950	0.323	.18
Semester GPAs					
1. Semester	2.752	0.699	2.894	0.472	.43
2. Semester	2.818	0.751	2.696	0.470	.56
3. Semester	2.722	0.962	2.924	0.379	.38
4. Semester	2.445	1.560	2.587	0.500	.67
5. Semester	3.333	0.431	2.696	0.470	<.001**
GPA from Nursing courses per semester					
1. Semester	2.752	0.699	2.838	0.617	.68
2. Semester	2.818	0.751	2.696	0.470	.56
3. Semester	2.873	1.278	2.915	0.390	.88
4. Semester	2.444	1.568	2.587	0.500	.67
5. Semester	3.333	0.431	2.696	0.470	.001**
Retention rates	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	
More than one year	10	71.4	25	80.6	.16
Less than one year	4	28.6	6	19.4	
Graduation rates					
Yes	9	64.3	20	64.5	.89

Note: \*\*  $p < .01$ . \*\*\*  $p < .001$ .

### T3. Third Traditional Cohort – Started in Spring 2013

The third traditional cohort started in the spring of 2013 with 12 students. The all but two of the students are female (83.3%) and half are Caucasian (50.0%). All students but one were enrolled part time (91.7 %) and the average age was around 31 years (Table T3.1).

The two cohorts are not significantly different in regard to demographic composition. However, the age of the students in the Fort Benning group is less diverse as that in the Albany group, i.e. the Fort Benning Group has a much smaller standard deviation for age than the Albany group.

Table T3.1. Comparing descriptives of the second traditional Fort Benning Bridge Cohort students with the first traditional Albany cohort

	Fort Benning		Albany		
	N	%	N	%	p-value
Gender					
Female	10	83.3	21	77.8	.32
Male	2	16.7	6	22.2	
Race					
Caucasian	6	50.0	16	59.3	.78
African American	5	41.7	9	33.3	
Other race	1	8.3	2	7.4	
Full-time/part-time student					
Full-time	1	8.3	4	14.8	.58
Part-time	11	91.7	23	85.2	
	Mean	SD	Mean	SD	
Age at program start	31.3	3.94	32.5	10.4	.71

Note: \*\*  $p < .01$ .

Table T3.2 shows the mean graduating GPAs were comparably high at 3.1 for Fort Benning students when compared to the Albany students.

Furthermore, semester GPAs for both cohorts as well as the GPA from the nursing courses of the first semester. In both cases, the Fort Benning students had higher average GPAs than the Albany students. The differences, however, were not statistically significant. In the second semester, the Fort Benning students' GPAs were higher by about 0.5 both for the nursing courses and overall. The difference was not statistically significant, due to the small size of the Fort Benning class and the relatively large standard deviations. However, it should be noted that by

the second semester, all Fort Benning students were still enrolled, while 10 out of the original 27 students in the Albany cohort had left the program. In the third semester, the Fort Benning cohort had significantly lower nursing and general GPAs due to two students receiving very low GPAs. However, by the end of the 4<sup>th</sup> semester Fort Benning and Albany students had comparable overall and nursing GPAs.

It is noteworthy to discuss retention rates. Only one of the Fort Benning students did not complete the 3<sup>rd</sup> semester, but 15 (56%) of the Albany students did not complete the first three semesters. The same trends showed in the 4<sup>th</sup> semester with 36.4% of Fort Benning students not completing the program, but 70.4% of Albany students not completing the program. The difference in completion rate was almost statistically significant.

Furthermore, Fort Benning students had more than twice the graduation rate at 66.7% than Albany students. The graduation rate for Albany students was very low for this cohort.

Table T3.2. Comparing the second traditional Fort Benning cohort and the first Albany traditional cohort on key success indicators

	<b>Fort Benning</b>		<b>Albany</b>		
	<b>Mean</b>	<b>SD</b>	<b>Mean</b>	<b>SD</b>	<b>p-value</b>
Graduating GPA	3.10	0.36	3.15	0.33	.76
Semester GPAs					
1. Semester	2.723	0.510	2.303	1.025	.19
2. Semester	2.708	0.467	2.244	0.792	.08
3. Semester	2.155	0.896	2.825	0.341	.04
4. Semester	3.318	0.437	3.2838	0.452	.88
GPA from Nursing courses per semester					
1. Semester	2.756	0.564	2.365	1.057	.24
2. Semester	2.667	0.492	2.188	0.834	.09
3. Semester	2.179	0.863	2.896	0.335	.03
4. Semester	3.250	0.463	3.222	0.441	.90
Retention rates	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	
More than one year	7	63.6%	8	29.6%	
Less than one year	4	36.4%	19	70.4%	.05
Graduation rates					
Yes	8	66.7	8	29.6	.03

Note: \*  $p < .05$ .

## Reportable Outcomes

Darton State College received 161 applications and accepted 71 for Customized Nursing Programs for the Fort Benning Community. Of those, 58 applicants successfully matriculated, in either the Traditional Hybrid Nursing program or the Accelerated Bridge program for LPNs, Paramedics and Army Medics 68W M6. By the completion of the project, 58 Fort Benning nursing students received their Associate of Science in Nursing degree; thus meeting the academic requirements necessary to take the National Council Licensure Examination (NCLEX) in the state of their choosing to become Registered Nurses.

Table R1.1. Illustrating when each cohort began and ended; as well as the number of students who graduated in each respective cohort.

<b>Cohort</b>	<b>Start Term</b>	<b>Completion Term</b>	<b>Students Graduated</b>
Bridge I	Fall 2010	Fall 2011	10
Traditional I	Spring 2011	Summer 2012	10
Bridge II	Fall 2011	Fall 2012	12
Traditional II	Spring 2012	Summer 2013	9
Bridge III	Fall 2012	Fall 2013	9
Traditional III	Spring 2013	Summer 2014	8

## Conclusions

The students as a whole were very pleased and appreciated the opportunity to be enrolled in a flexible nursing program. Most stated without the customization they would not be able to complete a nursing program. The formative evaluations have served the program well and provided opportunities for continual improvement of the program and courses. The courses and resources are of high quality and very effective. The statistical analysis rarely showed any statistical differences from the Fort Benning cohorts and the established Darton State College cohorts. The students performed at least as well as the Darton State College students on the main campus in Albany, Georgia. During the course of the project the Darton State College Grant Department served as the single point of contact for students when it came to non-academic issues that required contact with staff on the main campus (Admissions, Registrar, Financial Aid, Cashiers Office etc...). Overall, students preferred to use the single point of contact option for all non-academic issues and stated that the Grants Department was very responsive to inquiries and provided supportive student assistance.